



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/571,730

03/16/2007

Jens Otterbach

10191/4357

2781

26646 7590 04/07/2009

KENYON & KENYON LLP
ONE BROADWAY
NEW YORK, NY 10004

EXAMINER

TEIXEIRA MOFFAT, JONATHAN CHARLES

ART UNIT

PAPER NUMBER

2863

MAIL DATE

DELIVERY MODE

04/07/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/571,730	Applicant(s) OTTERBACH ET AL.	
	Examiner JONATHAN TEIXEIRA MOFFAT	Art Unit 2863	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 December 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 March 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/2/08, 3/13/06</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Drawings***

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: Page 10 lines 3-16 mention “1” and “2” which are not in the figures. Further, figure 1 contains reference label “10” which does not appear in the specification. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities: Applicant is required to make note of all priority documents in the first line of the specification.

Further, the title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: “Sequential Sensor Communication over Power Line”.

Claim Objections

Claims 5-8 are objected to because of the following informalities:

Although minor, the claims contain several grammatical errors and omissions of minor words. “a first sensor for receiving power via a line”, for example, does not accurately describe the sensor. As the claims appear to be a direct translation from another language, it is recommended that they be entirely rewritten to ensure as formal a presentation as possible. For example, the examiner suggests that claim 5 be rewritten as:

"A sensor system comprising:

a first sensor, powered by a power line

wherein, upon receiving a first power level on said power line, said first sensor transmits data on said power line for a first time interval;

a second sensor powered by said power line in parallel with said first sensor;

wherein said second sensor transmits data on said power line for a second time interval after said first time interval;

wherein each of said first and second sensors includes a timing sequence control system triggered by said first power level and which controls the subsequent data transmissions."

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1.

Claims 5 and 7-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Johannson (US pat 4788527).

With respect to claim 5, Johannson disclose an apparatus comprising:

1) A first sensor (Abstract and Fig 1 item 20) for receiving power via a line, the first sensor including a transmitter module for transmitting, at a point in time of receiving a first power level (Fig 2), data via the line for a first time interval (column 1 lines 53-65 and 2 lines 2-19).

2) A second sensor connected to the line in parallel to the first sensor (abstract and column 2 lines 29-31), the second sensor transmitting data after the first time interval for a second time interval (column 2 lines 29-39).

3) Wherein each of the first and second sensors includes a timing sequence control system which is triggered by the point in time and controls a subsequent transmission of the first and second sensors (column 2 lines 29-39 and Fig 2).

With respect to claim 7, Johannson discloses that the first and second sensors detect at least the first power level via a voltage change (Fig 2).

Art Unit: 2863

With respect to claim 8, Johansson discloses that the first and second sensors are connected to a control unit via the line, data transmission only being provided from the sensors to the control unit (Fig 1 and column 1 lines 53-65).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2.

In addition to the above anticipation in view of Johansson, claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Johansson in view of Gangemi (US pat 4540890).

With respect to claim 6, Johansson discloses that the first and second sensors are always powered at at least a second power level (Fig 2).

With respect to claim 6, Johansson fails to disclose that the second power level is lower than the first power level.

Gangemi teaches, with respect to claim 6 that the first and second sensors are always powered at at least a second power level, the second power level being lower than the first power level (column 3 lines 57-62 and Figs 4 and 7).

It would have been obvious to one of ordinary skill in the art to modify the apparatus of Johansson by using a rising edge or positive pulse for communication with remote units as taught by Gangemi. The examiner is interpreting claim 6 to indicate, in brief, that the way in which the control unit signals the sensors is to increase the power output by raising the voltage, current or both. Johansson signals sensors by reducing the output voltage (though the current is

Art Unit: 2863

increased). However, one of ordinary skill in the art would understand that whether the voltage/power is pulsed up or down does not really change the fundamental principles of the device and would understand them to be equivalent tactics which require no more than routine skill in the art to implement. Gangemi discloses a control unit which communicates with several sensor units arranged in parallel via power lines. One of ordinary skill in the art would the field of endeavor of Gangemi to be consistent with that of Johansson and would thus be aware of such methods of power line signaling.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Brennan (US pat 5252967) discloses a method of controlling remove sensors which is similar to applicant's invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JONATHAN TEIXEIRA MOFFAT whose telephone number is (571)272-2255. The examiner can normally be reached on Mon-Fri, from 7:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/jtm/
JTM
4/2/2009

/Bryan Bui/
Primary Examiner, Art Unit 2863